

Title (en)

Ultrasound catheter calibration with enhanced accuracy

Title (de)

Ultraschallkatheterkalibrierung mit verbesserter Genauigkeit

Title (fr)

Étalonnage de cathéter d'ultrasons avec précision améliorée

Publication

EP 1952768 B1 20110817 (EN)

Application

EP 08250368 A 20080130

Priority

- US 88745707 P 20070131
- US 96954108 A 20080104

Abstract (en)

[origin: EP1952768A2] An apparatus for calibration of a probe (22) that includes a magnetic position sensor and an acoustic imaging device has a rigid mechanical framework. One or more field generators (48,50,52), fixed to the framework, generate a magnetic field of known spatial characteristics. An acoustic target assembly (46) includes a phantom (56) coupled to a motion mechanism, which is arranged to move the phantom in a known orbit relative to the framework. A jig (54), fixed to the framework, holds the probe within the magnetic field of the one or more field generators, in an orientation suitable for the imaging device to image the phantom. A processor processes position and image signals from the probe in order to calibrate coordinates of the imaging device relative to the position sensor.

IPC 8 full level

A61B 8/12 (2006.01); **A61B 5/06** (2006.01)

CPC (source: EP KR US)

A61B 5/05 (2013.01 - KR); **A61B 8/12** (2013.01 - EP KR US); **A61B 8/4254** (2013.01 - EP US); **A61B 8/587** (2013.01 - EP US)

Cited by

EP3569145A1; CN109561879A; US11109838B2; US11406352B2; US11109833B2; WO2017201288A1; US10779796B2; US10976148B2

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MT NL NO PL PT RO SE SI SK TR

DOCDB simple family (publication)

EP 1952768 A2 20080806; **EP 1952768 A3 20080917**; **EP 1952768 B1 20110817**; AT E520354 T1 20110915; BR PI0800990 A2 20090113; CA 2619810 A1 20080731; CA 2619810 C 20140325; CN 101322651 A 20081217; CN 101322651 B 20111214; CN 102210594 A 20111012; EP 2347718 A1 20110727; HK 1119551 A1 20090313; IL 189118 A0 20081103; IL 189118 A 20130324; JP 2008188427 A 20080821; JP 5143578 B2 20130213; KR 20080071919 A 20080805; MX 2008001466 A 20090224; US 2008183075 A1 20080731; US 7996057 B2 20110809

DOCDB simple family (application)

EP 08250368 A 20080130; AT 08250368 T 20080130; BR PI0800990 A 20080131; CA 2619810 A 20080130; CN 200810085610 A 20080131; CN 201110158423 A 20080131; EP 11157697 A 20080130; HK 08111561 A 20081020; IL 18911808 A 20080129; JP 2008018897 A 20080130; KR 20080009434 A 20080130; MX 2008001466 A 20080130; US 96954108 A 20080104